

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark
Office
(Box PCT)
Crystal Plaza 2
Washington, DC 20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year)

07 November 1997 (07.11.97)

International application No.

PCT/US97/05008

Applicant's or agent's file reference

CM1189Q/JH

International filing date (day/month/year)

27 March 1997 (27.03.97)

Priority date (day/month/year)

30 March 1996 (30.03.96)

Applicant

SCHMITT, Achim

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

01 October 1997 (01.10.97)

☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

P.Regis

Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference CM1189Q/JH	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (PCT/IPEA/416)	
International application No. PCT/US97/05008	International filing date (day/month/year) 27/03/1997	Priority date (day/month/year) 30/03/1996
International Patent Classification (IPC) or national classification and IPC A61F13/15		
Applicant THE PROCTER & GAMBLE COMPANY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 4 sheets, including this cover sheet.

- ☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 4 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 01/10/1997	Date of completion of this report 15. 06. 98
Name and mailing address of the IPEA/  European Patent Office D-80298 Munich Tel. (+49-89) 2399-0, Tx: 523656 epmu d Fax: (+49-89) 2399-4465	Authorized officer Offmann, P Telephone No. (+49-89) 2399-2117



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US97/05008

I. Basis of the report

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

Description, pages:

1,2,4-19	as originally filed			
3,3a	as received on	28/01/1998	with letter of	23/01/1998

Claims, No.:

1-6	as received on	28/01/1998	with letter of	23/01/1998
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Drawings, sheets:

1/2,2/2	as originally filed
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2. The amendments have resulted in the cancellation of:

- | | | | |
|-------------------------------------|------------------|---------|------|
| <input checked="" type="checkbox"/> | the description, | pages: | 3 |
| <input checked="" type="checkbox"/> | the claims, | Nos.: | 1-10 |
| <input type="checkbox"/> | the drawings, | sheets: | |

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US97/05008

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-6
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-6
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-6
	No:	Claims	

2. Citations and explanations

see separate sheet

AD SECTION V

1- **INDEPENDENT CLAIM 1**

A disposable absorbent article is disclosed in EP-A-0337438 (D1), which is cited in the introduction of the. This document comprises all features contained in the preamble of claim 1.

This article differs from the subject-matter of claim 1 only in the features contained in the characterising portion, in particular in that:

"said wrapping elements are folded along a foldline into an in-use-position and are attached to garment facing surface of the main body portion."

These additional features are not known from the prior art in particular from D1 in which no attachment to the garment facing surface could be found.

The other cited documents do not seem to be relevant.

These additional features permit to provide a disposable absorbent article, which comprises side wrapping elements with improved functions in respect to soiling protection, convenience for the wearer, consistency of the crotch width of the article in use and maintains the comfort and non-irritation properties of the conventional side flaps.

None of the available prior art discloses the combination of the features claimed in independent claim 1.

The subject-matter of claim 1 would therefore appear to meet the requirements of articles 33.2 and 33.3 of PCT.

2- **DEPENDENT CLAIMS 2-6**

None of the available prior art discloses the features claimed in dependent claims 2-6.

The subject-matter of claims 2-6 would therefore appear to meet the requirements of articles 33.2 and 33.3 of PCT.

their predisposition) around the side edges of the crotch region of the undergarment.

5 EP-A-337438 discloses an attachment means for sanitary napkins by which resilient hinges are introduced to clamp the side edge of a wearers undergarments. This system suffers from the desire to resiliently attach the article to the crotch portion of the undergarment and hence requiring a hinge material which lacks comfort and can cause chaffing or skin irritation to the wearer.

WO-A-92/07537 discloses sanitary napkins or incontinence guards having flexible side flaps which are attached as separate pieces to the napkin or incontinence guard.

EP-A-530 781 discloses absorbent articles such as sanitary napkins having a deformation resisting apparatus which apparatus comprises tabs. The apparatus including the tabs is attached to the article and is intended to clamb an undergarment between the tabs and other portions of the deformation resisting apparatus.

EP-A-595 047 discloses a sanitary napkin with garment attachment panels. The garment attachment panels are provided separately and attached to the sanitary napkin. In addition they are designed so as to overlap and attach to each other in order to circumscribe the crotch portion of a sanitary napkin by mutual attachment. In this way they do not provide additional attachment and secure placement of the sanitary napkin within the undergarment.

The present invention addresses the problems of various available versions of side wrapping elements and improves their function in respect to soiling protection, convenience for the wearer, consistency of the crotch width of the article in use and maintains the comfort and non-irritation properties of the conventional side flaps.

Thus an objective of the present invention is to provide an absorbent article such as a sanitary napkin which is provided with an alternative to conventional side flaps by having a predisposition towards the in-use-position of the side flaps. It is another objective of the present invention to provide sanitary napkins with a defined crotch width after application to an undergarment independent of the various dimensions of undergarments and/or habits of wearers.

These and other objectives of the present invention will be more readily apparent when considered in reference with the following description and when taken in conjunction with the accompanying drawings.

AMENDED SHEET

3a

SUMMARY OF THE INVENTION

The present invention relates to disposable absorbent articles for wearing in the crotch portion of an undergarment, in particular to sanitary napkins or pantliners or adult continents inserts. The crotch portion of an undergarment comprises side edges which form part of the leg opening of the undergarment. The absorbent articles according to the present invention have a longitudinal and a transverse axis and comprise a main body portion which has longitudinal side

Claims

1) Disposable absorbent article (20) for wearing in the crotch portion of an undergarment, said crotch portion comprising side edges which form part of the leg opening of said undergarment, said article (20) having a longitudinal axis (L) and a transverse axis (T), said article comprising a main body portion (21) having longitudinal side edges (23) substantially extending parallel to said longitudinal axis (L) and having transverse side edges (22) substantially extending parallel to said transverse axis (T), said main body portion (21) further having a wearer facing surface and a garment facing surface, and said article comprising side wrapping elements (50) having an in-use-position in which said side wrapping elements (50) wrap said side edges of said crotch portion, said side wrapping elements (50) are integral with said main body portion (21), said article (20) being characterised in that said side wrapping elements (50) are folded along a foldline (25) into said in-use-position and said side wrapping elements (50) are attached to said garment facing surface of said main body portion to provide a predisposition of said side wrapping elements (50) to assume said in-use-position.

2) Disposable absorbent article (20) according to claim 1 characterised in that said side wrapping elements (50) are attached to said garment facing surface along a longitudinal line (27) over a length of not more than 50% of the length of said foldline (25).

3) Disposable absorbent article (20) according to claim 2 characterised in that said longitudinal line of attachment (27) has a midpoint which is not more than 10mm from the midpoint of said foldline (25).

4) Disposable absorbent article (20) according to claim 1 characterised in that said main body portion (21) comprises a topsheet (38) which provides said wearer facing surface, and a backsheet (40) which provides said garment facing surface, and said side wrapping elements (21) comprise integral extensions of said topsheet (38) and said backsheet (40) and said side wrapping elements (21) are folded along a foldline (25) into said in-use-position and said side wrapping elements (50) are attached to said main body portion (21) along the common portion of said longitudinal side edges (23) of said main body portion (21) and the side wrapping elements (50), said common portion being at least partially between said foldline (25) and said longitudinal axis (L).

5) Disposable absorbent article (20) according to claim 4 characterised in that the material between said longitudinal side edges (23) of said main body portion (21) and said foldline (25), preferably including said foldline (25) itself, is severed from said disposable absorbent article (20).

6) Disposable absorbent article (20) according to any of the preceding claims characterised in that said attachment is provided by an adhesive means or welding of contacting materials.

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PATENT COOPERATION TREATY
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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference CM1189Q/JH	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US 97/ 05008	International filing date(<i>day/month/year</i>) 27/03/1997	(Earliest) Priority Date (<i>day/month/year</i>) 30/03/1996
Applicant THE PROCTER & GAMBLE COMPANY et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (see Box I).

2. ☐ Unity of invention is lacking (see Box II).

3. ☐ The international application contains disclosure of a **nucleotide and/or amino acid sequence listing** and the international search was carried out on the basis of the sequence listing

☐ filed with the international application.

☐ furnished by the applicant separately from the international application,

☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.

☐ Transcribed by this Authority

4. With regard to the title, ☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is:

Figure No. 3 ☒ as suggested by the applicant.

☐ None of the figures.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 97/05008

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61F13/15

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 337 438 A (MCNEIL-PPC) 18 October 1989 cited in the application	1-4,10
A	see abstract; figure 2 see column 4, line 10 - line 15 see column 4, line 47 - line 50 see column 6, line 17 - line 26 ---	5-9
X	WO 92 07537 A (MÖLNLYCKE) 14 May 1992 see abstract; figure 3 see page 5, line 16 - line 21 see page 9, line 2 - line 4 ---	1-4,10
X	EP 0 530 781 A (MCNEIL-PPC) 10 March 1993 see column 7, line 50 - column 8, line 3 see figures 1-3 --- -/--	1-3,10

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

17 July 1997

Date of mailing of the international search report

25.07.97

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+ 31-70) 340-3016

Authorized officer

Nice, P

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 97/05008

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 595 047 A (KIMBERLY-CLARK) 4 May 1994 see page 4, line 56 - line 58 see page 5, line 46 - line 49; figure 3 ---	1-4
A	WO 95 07675 A (PROCTER & GAMBLE) 23 March 1995 cited in the application see page 29, line 22 - line 33 see page 30, line 15 - line 18 ---	1,2,5
A	EP 0 695 542 A (PROCTER & GAMBLE) 7 February 1996 cited in the application see column 7, line 50 - column 8, line 10 see column 9, line 13 - line 35 -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP 97/05008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0337438 A	18-10-89	US 5125918 A	30-06-92
		AU 622163 B	02-04-92
		AU 3276489 A	19-10-89
		CA 1330149 A	14-06-94
		GR 89100239 A	31-01-90
		IE 62808 B	08-03-95
		IN 171063 A	11-07-92
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WO 9207537 A	14-05-92	PT 90277 B	31-03-94
		SE 469620 B	09-08-93
		AU 656928 B	23-02-95
		AU 8875291 A	26-05-92
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		JP 6125938 A	10-05-94
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		ZA 9305883 A	11-03-94

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 97/05008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9507675 A	23-03-95	AU 7368394 A	20-02-95
		AU 7370394 A	20-02-95
		AU 7370494 A	20-02-95
		AU 7474994 A	20-02-95
		AU 7799694 A	10-04-95
		AU 7832494 A	03-04-95
		BR 9407132 A	10-09-96
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		WO 9503022 A	02-02-95
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		WO 9503025 A	02-02-95
		WO 9508311 A	30-03-95
		US 5558663 A	24-09-96

Information on patent family members

PC 97/05008

Publication date